



### **Naval Information Warfare Center Pacific**

## FY21 End of Year Report

## **National Defense Industry Association**

December 7, 2021

Mr. Bill Bonwit
Executive Director



## NIWC Pacific's Mission

Research, Development, Engineering, Prototyping

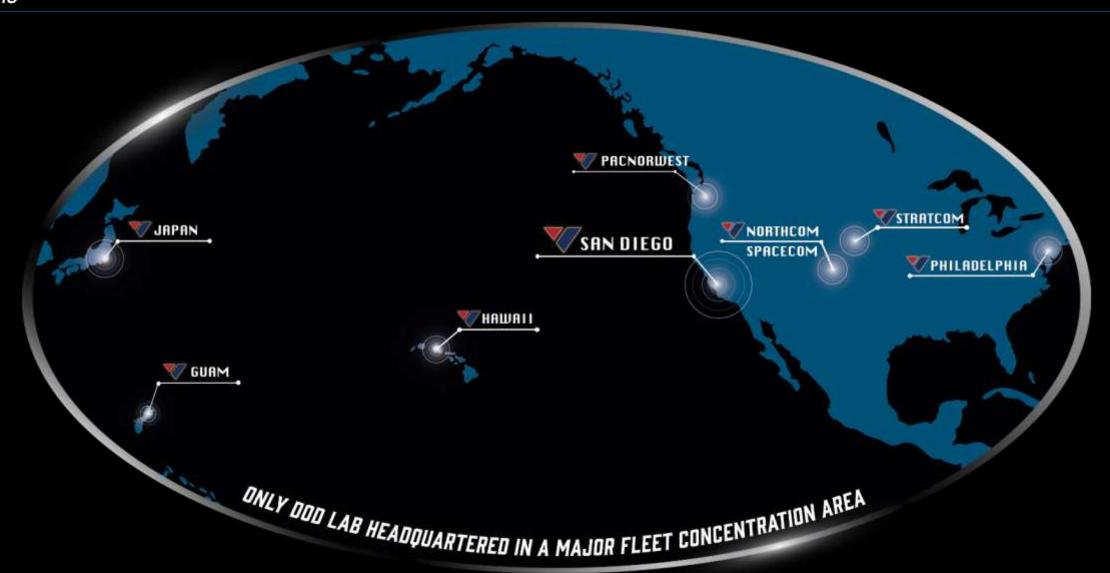
Test and Evaluation, Acquisition, Installation, and In-Service Engineering

C4ISR, Cyber and Space

Integrated Across All Warfighting Domains

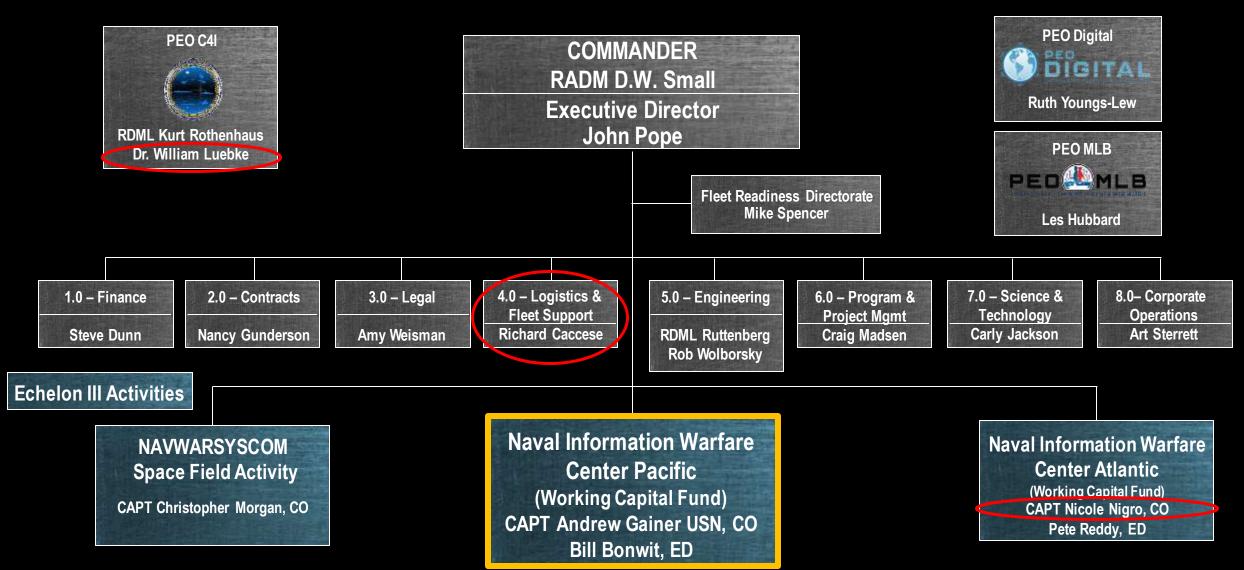


## **Our Strategic Locations**



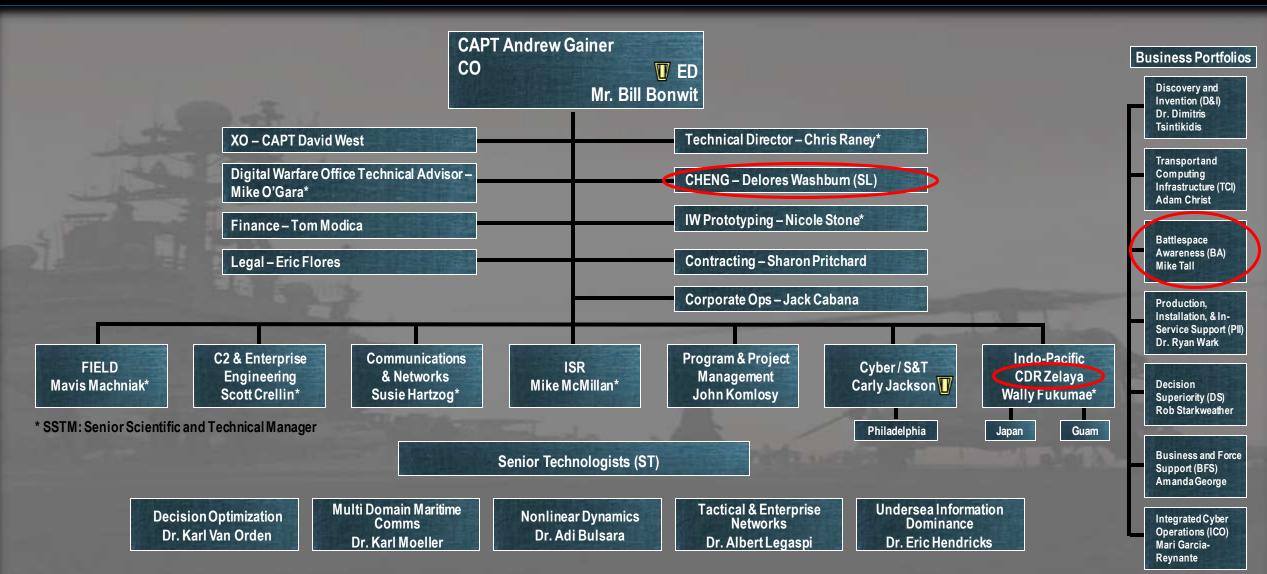


## NAVWARSYSCOM Organization





# NIWC Pacific Organization





## Capabilities – Across the Full Life Cycle

**Today** The Navy in Operation

**Installation and Support** 

#### **Tomorrow**

The Navy in Construction

Engineering, Development, Test and Evaluation

**Future** The Navy in Planning

Science and Technology



Automated Production, Installation, & In-Service Support



Marine Mammals

3D Scanning / Additive Manufacturing





**Networks** 



**Predictive Maintenance** 



C4ISR for Unmanned Vehicles



Overmatch Software Armory Compile to Combat

Integrated Cyber

**Operations** 



**Live Virtual Constructive Simulations** 



Space Command & Control



**Small Satellite Communications** 





Graphene



**Solid State Laser Atmospherics** 



Artificial Intelligence / Machine Learning



Quantum



## 2021 Significant Awards



Graham Sanborn
Rising Star Award in Engineering
AFCEA TechNet Cyber 2021



Naval Enterprise Networks Digital Transformation
Team Distinguished Award for Excellence in
Information Technology
AFCEA TechNet Cyber 2021



Jamie Lukos
ASN RDA Dr. Delores Etter
Top Scientist and Engineer
Emergent Scientist Investigator Award



Dr. Jia Chieh
ASN RDA Dr. Delores Etter Top Scientist and
Engineer Individual Award



Rowell Bacani, Vince Barton & ITCS Notarianni NDIA A. Bryan Lasswell Award



Bruce Weidner
DoN Financial Management Award



Michael Day & Jonathan Burgard DoN IT Excellence Award



Jei Chen
Society of Asian Scientists and Engineers
Professional Achievement Award



# End of Year Snapshot



## Our People Are Our Greatest Strength

CIVILIANS	5,350
Scientists & Engineers	2,581
Tech Specialists	1,145
S&E Technicians	354
Admin Professionals	1,083
General Support	156
SES / ST / SSTM / SL	31
MILITARY	221
Enlisted	159
Officers	62
TOTAL	5,571

New Professional Program:

4.085 SCI Clearances

√ ~3,314 applicants for 80 positions

**✓** Average GPA 3.45

Highly credentialed, educated workforce ✓ 206 PhDs ✓ 1,523 Masters

✓ 2,583 Civil Servants & Military

1,502 Contractors









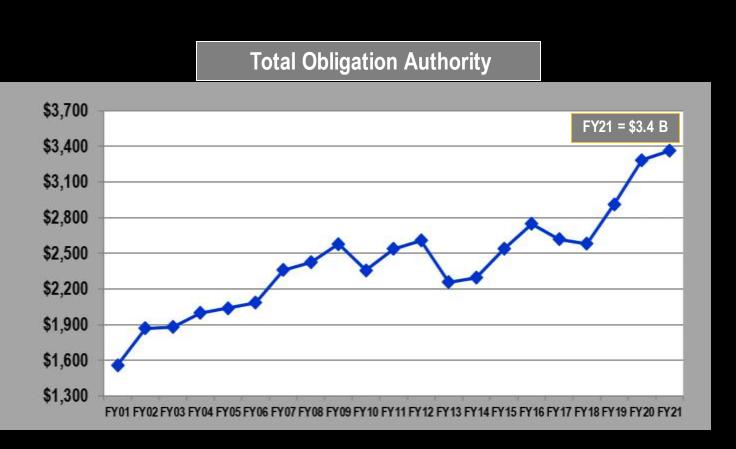


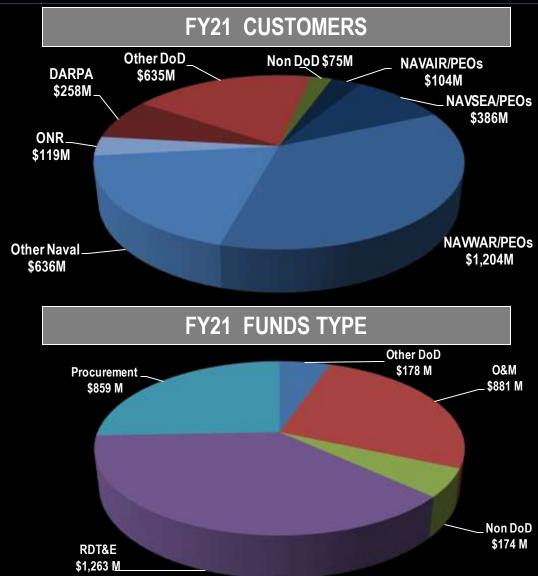
FY21 = \$3.4B Total Obligation Authority

~ 40% of workforce: Active Duty, Reservists, Veterans ~ 498 Civilians & Military Directly Supporting C4ISR with the Fleet Around the World



## **Increasing Customer Demand**







### **FY21 Contracts**

### **TOTAL CONTRACTS**

Competition: Target – 78% Achieved 79% (Dollars)

Active contracts: 449 (D, C, and grants only)

Firms awarded contracts: 817 Different firms were awarded contracts & orders

(including simplified acquisitions)

Total
Amount
Obligated
\$1.5B

#### **Small Business Goals**

TYPE	Achieved	Target
Small Business Awards	36.77%	36.77%
HUBZone Small Businesses	1.83%	1.69%
Disadvantaged Small Business	11.77%	11.75%
8(a) Small Business	3.4%	N/A
Woman-Owned Small Business	6.62%	6.35%
Service-Disabled Vet-Owned Small Business	6.52%	3.62%



### FY21 Top 25 Contractors (based on \$ New Actions)

	Contractor	<b>Dollars Obligated</b>
1	SCIENCE APPLICATIONS INTERNATIONAL CORPORATION	\$119,509,177
2	SERCO INC.	\$111,796,002
3	BOOZ ALLEN HAMILTON INC	\$101,443,562
4	KOAM ENGINEERING SYSTEMS, INC.	\$48,970,194
5	INNOVASYSTEMS INTERNATIONAL, LLC	\$43,840,614
6	TACTICAL ENGINEERING & ANALYSIS, INC.	\$30,916,097
7	EPOCH CONCEPTS, LLC	\$27,035,053
8	HII FLEET SUPPORT GROUP LLC	\$26,486,876
9	CENTURUM INFORMATION TECHNOLOGY, INC.	\$25,449,593
10	LEIDOS, INC.	\$25,291,286
11	GENERAL DYNAMICS INFORMATION TECHNOLOGY, INC.	\$25,012,769
12	PERATON INC.	\$21,570,917

Indicates Small Business Categorization



### FY21 Top 25 Contractors (based on \$ New Actions) cont'd

	Contractor	Dollars Obligated
13	VT MILCOM INC.	\$19,655,868
14	ALUTIIQ INFORMATION MANAGEMENT, LLC.	\$19,391,621
15	RAYTHEON BBN TECHNOLOGIES CORP.	\$17,924,647
16	GEOCENT, L.L.C.	\$16,078,225
17	INFORMATION SYSTEMS SOLUTIONS, INC	\$15,955,899
18	LEIDOS, INC.	\$15,899,458
19	SCIENTIFIC RESEARCH CORPORATION	\$15,278,914
20	NORTHROP GRUMMAN SYSTEMS CORPORATION	\$15,240,681
21	FORWARD SLOPE INCORPORATED	\$14,609,793
22	NATIONAL MARINE MAMMAL FOUNDATION, INC.	\$14,052,393
23	G2 SOFTWARE SYSTEMS, INC.	\$12,705,919
24	KING TECHNOLOGIES, INC.	\$12,517,438
25	MCKEAN DEFENSE GROUP, LLC	\$12,042,973

Indicates Small Business Categorization



## FY21 Top 10 Small Business Contractors (\$ New Actions)

	Contractor	<b>Dollars Obligated</b>
1	KOAM ENGINEERING SYSTEMS, INC.	\$48,970,194.25
2	TACTICAL ENGINEERING & ANALYSIS, INC.	\$30,916,096.65
3	EPOCH CONCEPTS, LLC	\$27,035,053.34
4	ALUTIIQ INFORMATION MANAGEMENT, LLC.	\$19,391,620.72
5	INFORMATION SYSTEMS SOLUTIONS, INC	\$15,955,898.87
6	CENTURUM INFORMATION TECHNOLOGY, INC.	\$14,952,826.71
7	FORWARD SLOPE INCORPORATED	\$14,609,793.32
8	G2 SOFTWARE SYSTEMS, INC.	\$12,705,919.03
9	KING TECHNOLOGIES, INC.	\$12,517,438.04
10	FCN, INC.	\$11,228,128.97



## Intellectual Capital and Partnerships – Industry and Academia

#### Partnering in Education and Community Outreach







### **Via our Outreach Programs 719 NIWC Pacific Personnel** have engaged 8,931 Students

PATENTS	FY21
Disclosures	43
Patents Filed	38
Patents Issued	56



<b>PUBLICATIONS</b>	FY21
Journal Article	110
Conf. Papers	354
TRs/TDs	89

# Carnegie Mellon



NIWC Pacific By Dllu - Own work, CC BY-SA 4.0 FY21 Command Overview

San Diego State University

Geographer - Self-photographed, CC BY 1.0

### **UC San Diego**



#### **Technology Transfer**

- **▼** Promotes innovation and creativity with NIWC Pacific technology through working relationships with industry and academia
- ▼ Important pathway to move Navy innovation from lab to market and ultimately the warfighter







- Eight Southern California companies are using NIWC Pacific technologies.
  - **CRADA Cooperative Research and Development Agreement**
- ▼ FY21: 57 Active CRADAs
- ▼ Establish and foster R&D partnerships with industry and academia, allowing parties to share R&D resources, personnel, equipment and costs, enabling development of new capability, technology, IP



### Insights for the Future

- ▼ Information Warfare is a primary warfighting domain
  - Non-kinetic fires
- ▼ Our role is to drive the R&D, engineering for IW systems
- ▼ Developing and delivering at the speed of relevance
- Increasing need for enterprise engineering
- Transforming the User Experience
  - Automation
  - Elegant Engineering
  - System "toughness"
- Continued focus on AI, ML, autonomy, decision support, ISR, networks, and cyber security
- Culture built on trust, unity of purpose, across the entire team





